

Safety Data Sheet

According to Regulation (EC) No 1907/2006, Annex II,

Amended by COMMISSION REGULATION (EU) 2020/878,

Amended by COMMISSION DELEGATED REGULATION (EU) 2023/707,

According to REGULATION (EC) No 1272/2008

Photoluminescent pigment

Version 1.0

Issue date: 2024/6/10

Revision date: 2024/6/10

Section 1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier:

Identification on the label: NL-Pigments to luminescent paint,

Article numbers: **57850, 57852, 57835, 57849**, Distribution by:

Kroschke sign-international GmbH, Kroschkestr. 1, 38112 Braunschweig, vertrieb@kroschke.com

Additional identification: Nanoform is NOT covered by this SDS.

Identification of the product: CAS#12004-37-4 EC#234-455-3

Index Number: Not available.

REACH registration No.: Not available.

1.2 Relevant identified uses of the substance or mixture and uses advised against:

1.2.1 Identified uses:

Use for manufacturing photoluminescent sign, injection molding, silk printing etc.

1.2.2 Uses advised against:

No uses advised against are identified.

1.3 Details of the supplier of the safety data sheet:

Supplier (Importer): Corroconsult GmbH, Elstorfer Ring 70, D-21149 Hamburg, office@corroconsult.de

Supplier(Manufacturer): Dezhou Grand Luminous Technology Co.,Ltd.

Address: Shizhong district, Yucheng, Dezhou, China

Contact person(E-mail): sales@sd-grand.com

Telephone: +86-534-7367616

Fax: +86-534-7367616

1.4 Emergency telephone Number:

+86-534-7367616 Only available during office hours (9:00a.m.-17:30p.m.)

Available outside office hours? YES ☐ NO ☒

Section 2 Hazards identification

2.1 Classification of the substance or mixture:

2.1.1 Classification of the substance:

The substance is classified as following according to REGULATION (EC) No 1272/2008:

REGULATION (EC) No 1272/2008	
Hazard classes/Hazard categories	Hazard statement
Skin Irrit. 2	H315
Eye Irrit. 2	H319
STOT SE 3	H335

For full text of H- phrases: see section 2.2.

2.2 Label elements:

Hazard pictogram(s): Signal word: Warning

Hazard statement(s): H315: Causes skin irritation.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

Precautionary statement(s):

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P264: Wash hands thoroughly after handling.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P302 + P352: IF ON SKIN: Wash with plenty of water/...

P304 + P340: IF INHALED: remove person to fresh air and keep comfortable for breathing.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312: Call a POISON CENTER/doctor/... if you feel unwell.

P332 + P313: If skin irritation occurs: Get medical advice/attention.

P337 + P313: If eye irritation persists: Get medical advice/attention.

P362 + P364: Take off contaminated clothing and wash it before reuse.

P403 + P233: Store in a well-ventilated place. keep container tightly closed.

P405: Store locked up.

P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental Hazard information (EU) Not applicable.

2.3 Other hazards:

The substance is not PBT / vPvB.

The substance is not identified as having endocrine disrupting properties.

Section 3 Composition/information on ingredients

Substance/Mixture: Substance

Ingredient(s):

Chemical name		Registration No.	Cas No.	EC No.	Concentration	Specific Concentration limits, M-Factors, Acute Toxicity Estimates (ATE)
strontium aluminate	Sr:46.3%	N/A	12004-37-4	234-455-3	>99.9%	N/A
	Al:46.67%					
	O:6.1%					
	Eu:0.51%					
	Dy:0.42%					

Section 4 First aid measures

4.1 Description of first aid measures:

In all cases of doubt, or when symptoms persist, seek medical attention.

4.1.1 In case of inhalation:

Remove from exposure, taking care to avoid inhaling vapours. Keep warm rest. Obtain medical attention if symptoms appear.

4.1.2 In case of skin contact:

Wash skin with water. Obtain medical attention if soreness or redness persists.

4.1.3 In case of eyes contact:

Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Remove contact lenses if possible. Obtain medical attention.

4.1.4 In case of ingestion:

Do not induce vomiting. Obtain medical attention if symptoms appear or if large quantities have been ingested. Accidental ingestion at a level high enough to be dangerous to health is unlikely.

4.2 Most important symptoms and effects, both acute and delayed:

Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

4.3 Indication of any immediate medical attention and special treatment needed:

If skin irritation or rash occurs, get medical advice/attention.

Section 5 Firefighting measures**5.1 Extinguishing media:**

Suitable extinguishing media: Use water spray, dry powder, foam or carbon dioxide extinguishing agents to extinguish fires.

Unsuitable extinguishing media: Not available.

5.2 Special hazards arising

from the substance or mixture In case of fire, the following can be released:
Strontium oxide, aluminum oxide.

5.3 Advice for firefighters: Self-contained breathing apparatus
with full-face mask and full protective clothing (standard wear).

Section 6 Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures:****6.1.1 For non-emergency personnel:**

Eliminate all sources of ignition. Wear appropriate protective clothing. Avoid breathing vapours. Keep unnecessary people away; isolate hazard area and deny entry. Consider need for evacuation. Stay up wind and keep out of low areas where vapour may accumulate and ignite.

6.1.2 For emergency responders:

Wear an appropriate NIOSH/MSHA approved respirator if dust is generated.

6.2 Environmental precautions:

Try to prevent the material from entering drains or water courses. Advise Authorities if spillage has entered water course or sewer or has contaminated soil or vegetation.

6.3 Methods and material for containment and cleaning up:

Sweep and shovel away. Place in a suitable closed container for disposal.

6.4 Reference to other sections:

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

Section 7 Handling and storage**7.1 Precautions for safe handling:****7.1.1 Protective measures:**

Store in tightly closed containers in cool, dry, isolated, well-ventilated area.

Avoid inhaling dust. Avoid contact with eyes, skin and clothing. Suitable equipment for dealing with fires, spills and leaks must be readily available.

Earth all equipment. Use explosion protected electrical equipment and lighting.

Do not smoke eat or drink in areas of use and storage. Use closed-system transfers wherever possible. Earth (ground) lines and equipment used during transfer to reduce possibility of static spark initiated fire or explosion

7.1.2 Advice on general occupational hygiene:

Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities:

Storage area should be cool, dry, well ventilated, out of direct sunlight. Store in original containers. Store away from sources of heat or ignition. Storage tanks should have equipotential electrical bonding and be earthed. Storage should be closed.

7.3 Specific end use(s): Not applicable.**Section 8 Exposure controls/personal protection****8.1 Control parameters:**

8.1.1 Occupational exposure limits: Not available.

8.1.2 Additional exposure limits under the conditions of use: Not available.

8.1.3 DNEL/DMEL and PNEC-Values: Not available.

8.2 Exposure controls:

8.2.1 Appropriate engineering controls: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.2.2 Individual protection measures, such as personal protective equipment:

Eye/face protection: Safety goggles.

Skin protection:

Hand protection: Handle with gloves.

Body protection: Standard work wear and safety boots for normal handling and use.

Respiratory protection: Wear approved mask/respirator.

Thermal hazards: Wear suitable protective clothing to prevent heat.

8.2.3 Environmental exposure controls: Avoid discharge into the environment. According to local regulations, Federal and official regulations.

Section 9 Physical and chemical properties**9.1 Information on basic physical and chemical properties:**

Physical state: Powder

Colour:	Yellowish
Odour:	Weak odor
Odour threshold:	Not available
PH:	Not available
Melting point/freezing point (°C):	Not available
Boiling point or initial boiling point and boiling range (°C):	Not available
Flash point (°C):	Not available
Evaporation rate:	Not available
Flammability limit - lower (%):	Not available
Flammability (gas, liquid, solid):	Not applicable
Ignition temperature (°C):	Not available
Lower and upper explosion limit:	Not available
Vapour pressure (20°C):	Not available
Relative vapour density:	Not available
Relative Density (g/cm3):	Not available
Bulk density (kg/m3):	Not available
Solubility in water (g/l, 20°C):	Not available
Solubility in other polar and non-polar solvents (g/l, 20°C):	Not available
Partition coefficient n-octanol/water (log Po/w, 20°C):	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Kinematic viscosity (mm²/s):	Not available
Particle characteristics:	Not applicable
Explosive properties:	Not available
Oxidising properties:	Not available
Molecular Formula:	SrMgAl4O8:Eu2+Dy3+
Molecular Weight:	Not available
9.2. Other information:	
Fat solubility(solvent-oil to be specified) etc:	Not available
Surface tension:	Not available
Dissociation constant in water(pKa):	Not available
Oxidation-reduction Potential:	Not available

Section 10 Stability and Reactivity

- 10.1 Reactivity:** The substance is stable under normal storage and handling conditions.
- 10.2 Chemical stability:** Stable at room temperature in closed containers under normal storage and handling conditions.
- 10.3 Possibility of hazardous reactions:** No dangerous reactions known.
- 10.4 Conditions to avoid:** Incompatible materials. High temperatures.
Proximity to sources of ignition.
- 10.5 Incompatible materials:** Not available.

10.6 Hazardous decomposition products: Strontium oxide, aluminum oxide.

Section 11 Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008:

Acute toxicity:

LD50(Oral, Rat): Not available

LD50(Dermal, Rabbit): Not available

LC50(Inhalation, Rat): Not available

Skin corrosion/irritation: Causes skin irritation.

Serious eye damage/irritation: Causes serious eye irritation.

Respiratory or skin sensitization: Not classified

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive toxicity: Not classified

STOT- single exposure: May cause respiratory irritation.

STOT-repeated exposure: Not classified

Aspiration hazard: Not classified

11.2 Information on other hazards

Endocrine disrupting properties The substance is not identified as having endocrine disrupting properties.

Other information: Not applicable

Section 12 Ecological information

12.1 Toxicity:

Acute (short-term) toxicity:

LC50(96h, Fish): Not available

LC50(48h, Crustacea): Not available

EC50(72h, Algae/aquatic plants): Not available

Chronic (long-term) toxicity:

NOEC(Fish): Not available

NOEC(Crustacea): Not available

EC50(Algae/aquatic plants): Not available

12.2 Persistence and degradability: Not available

12.3 Bioaccumulative potential: Not available

12.4 Mobility in soil: Not available

12.5 Results of PBT and vPvB assessment: The substance is not PBT / vPvB.

12.6 Endocrine disrupting properties: The substance is not identified as having endocrine disrupting properties.

12.7 Other adverse effects: Not available.

12.8 Additional information Not available.

Section 13 Disposal considerations

13.1 Waste treatment methods: Dispose of in accordance with all applicable local and national regulations. Use recovery/recycling where feasible, otherwise incineration is the recommended method of disposal. Empty containers may contain hazardous residues. Do not cut, puncture or weld on or near to the container

Labels should not be removed from containers until they have been cleaned. Contaminated containers must not be treated as household waste. Containers should be cleaned by appropriate methods and then re-used or disposed of by landfill or incineration as appropriate. Do not incinerate closed containers.

Section 14 Transport Information

	Land transport (ADR/RID)	Inland waterways (ADN)	Sea transport (IMDG)	Air transport (ICAO/IATA)
14.1 UN number or ID number	Not regulated	Not regulated	Not regulated	Not regulated
14.2 UN proper shipping name	Not regulated	Not regulated	Not regulated	Not regulated
14.3 Transport hazard class(es)	Not regulated	Not regulated	Not regulated	Not regulated
14.4 Packing group	Not regulated	Not regulated	Not regulated	Not regulated
14.5 Environmental hazards	No	No	No	No
14.6 Special precautions for user	See section 2.2	See section 2.2	See section 2.2	See section 2.2
14.7 Maritime transport in bulk according to IMO instruments	Not regulated	Not regulated	Not regulated	Not regulated

Section 15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

Relevant information regarding authorization: Not applicable.

Relevant information regarding restriction: Not applicable.

Other EU regulations: Employment restrictions concerning young person must be observed. For use only by technically qualified individuals.

Other National regulations: Not applicable

15.2 Chemical Safety Assessment YES ☐ NO ☒

Section 16 Other information

16.1 Indication of changes:

Version 1.0 Amended by (EU) 2020/878, (EU) 2023/707

16.2 Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: Code international maritime dangerous goods code

Products name: Photoluminescent pigment

Version #: 1.0 issue date: Jun 10, -2024

SDS: EU

ICAO: International Civil Aviation Organization

IATA: International Air Transport Association

LC50: median lethal concentration

EC50: The effective concentration of substance that causes 50% of the maximum response.

NOEC: No Observed Effect Concentration

DNEL: derived no-effect level

PNEC: predicted no-effect concentration

16.3 Key literature references and sources for data

ECHA Registered substances data

16.4 Classification and procedure used to derive the classification for mixtures according to Regulation (EC)1272/2008 [CLP]

Classification according to Regulation (EC) No. 1272/2008		Classification procedure
Skin Irrit. 2	H315	On basis of test data
Eye Irrit. 2	H319	On basis of test data
STOT SE 3	H335	On basis of test data

16.5 Relevant H-statements (number and full text):

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

16.6 Training instructions: Not applicable.

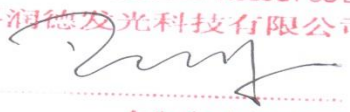
16.7 Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

16.8 Authors and providers of documents and information:

Dezhou Grand Luminous Technology Co Ltd

Website: www.sd-grand.com Tel: 0534-7367616 Email: sales@sd-grand.com

For and on behalf of
DEZHOU GRAND LUMINOUS TECHNOLOGY CO LTD
德州科润德发光科技有限公司

Authorized signature(s)